Intermittent Motivational Interviewing and Transdiagnostic CBT for Anxiety: A Case Study

Isabella Marker¹ and Peter J. Norton¹

Abstract
Recent meta-analytic findings have revealed that the addition of motivational interviewing (MI) to cognitive behavior therapy (CBT) for anxiety disorders improves treatment outcome. However, for the most part, previous research has limited MI as a prelude to CBT. This article explored the benefits and complications of a more integrated approach by adapting and examining an already established transdiagnostic CBT protocol to include intermittent MI strategies. The presented protocol is described and illustrated using a case study of a woman meeting criteria for four anxiety disorder diagnoses. This study presents session-by-session treatment accounts, as well as pre, post, and follow-up data. Results indicated clinically significant improvement, supporting the utility of intermittent MI strategies within CBT. Implementation recommendations and future research directions are discussed.

Keywords
motivational interviewing, cognitive behavior therapy, anxiety, transdiagnostic

1 Theoretical and Research Basis for Treatment
Cognitive behavior therapy (CBT) is widely acknowledged as an effective treatment for anxiety disorders in both research and clinical setting (Kaczkurkin & Foa, 2015; Wootton, Bragdon, Steinman, & Tolin, 2015). Although CBT is effective, approximately half fail to respond to treatment (Springer, Levy, & Tolin, 2015) and additional therapy is sought by 35% to 45% of patients following termination (Westen & Morrison, 2001). Furthermore, treatment drop out is high at approximately 30% (Fernandez, Salem, Swift, & Ramtahal, 2015).

CBT is a proactive therapy requiring active steps toward reaching therapy goals. Alongside the specified time commitment, CBT asks clients to challenge current thought and belief systems, and change unhelpful and avoidant behaviors. The process of changing such habits requires a degree of motivation on part of the client. Motivation is, therefore, considered a key factor in predicting treatment progress and outcome. Prior research has highlighted the role of motivation in reducing anxiety symptoms (Marker, Salvaris, Thompson, Tolliday, & Norton, 2019) as well as improving process factors such as therapeutic alliance (Hunter, Button, & Westra, 2014) and treatment compliance (Sijercic, Button, Westra, & Hara, 2016). Low levels of motivation have

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been cited as a reason for treatment drop out (Alfonsson, Olsson, & Hursti, 2016). Motivational interviewing (MI) has, therefore, been suggested as an adjunct to CBT for anxiety disorders (Westra & Arkowitz, 2011).

**MI and CBT for Anxiety**

MI was initially developed for alcohol use disorders and aimed to resolve ambivalence and increase motivation for change, as it has been successfully implemented in several other areas, both a stand-alone and complimentary treatment. As a complementary treatment, MI has mostly been implemented as a prelude to action-oriented therapies such as CBT, with the premise that MI strengthens the effects of CBT, as clients enter therapy with greater motivation and commitment to change (Miller & Rollnick, 2012). Although MI as a prelude to CBT is the most common approach, two additional ways of combining MI and CBT have been proposed. The first approach uses MI as a tool for addressing resistance and ambivalence in therapy and the other approach fully merges the two treatments, with elements of MI kept during the practice of CBT (Westra & Arkowitz, 2011). Although a relatively new area of research, several studies have now shown that the inclusion of MI alongside standard CBT leads to promising outcomes. For example, a recent meta-analysis of 12 studies found that MI + CBT outperform CBT alone in terms of overall symptom reduction (Marker & Norton, 2018).

**MI as a prelude to CBT for anxiety.** To date, all research that has included MI within a standard CBT for anxiety protocol has included MI prior to the commencement of CBT. This is valuable as clients entering therapy may be highly ambivalent and MI may help relieve treatment-related fears about beginning therapy (Rowa et al., 2014). However, for the most part, studies have limited MI to the beginning of therapy.

There are several disadvantages to limiting MI to pretreatment. For example, the approach assumes that motivation will remain stable after completing MI. However, a recent study that examined motivation during group transdiagnostic CBT (tCBT) for anxiety found that motivation changed depending on stage of therapy (Marker et al., 2019). This indicates that motivation fluctuates over the course of treatment and further MI interventions may be warranted, particularly as therapy becomes more challenging. In fact, studies that have employed pretreatment MI and tracked client change scores over time found that the effectiveness of MI subsided (Barrera, Smith, & Norton, 2016; Yang & Strodl, 2011).

An additional problem with including MI only at pretreatment is that not all benefits of MI are included. Prior conceptualizations of MI recognized two distinct phases of MI. The first, Phase 1, focuses on exploring and overcoming ambivalence about change. This phase is necessary prior to CBT as it explores pros and cons of engaging in treatment and allows individuals to explore their own values and reasons for changing. The aim of Phase 2 is to foster self-efficacy within the individual. In spite of the newer addition of Miller and Rollnick’s (2012), MI manual no longer reference two phases; their presence is still felt through the four elements of the MI spirit (partnership, acceptance, compassion, evocation) as well as the four processes of MI (engaging, focusing, evoking, planning). Broadly speaking, ambivalence is explored and resolved (Phase 1) when a therapist effectively *engages* with a client using an attitude of partnership, acceptance, and compassion (MI spirit). The therapist and client collaborate on setting a clear *focus* for treatment and the therapist then uses *evocation* techniques affirming client motivation, while holding client concern, fear, and ambivalence. *Planning* for change requires a clear understanding of a client’s unique motivations for change as well as an ability to nurture self-efficacy (Phase 2). As described by Miller and Rollnick (2012), MI is not a purely linear progression of processes, but rather each phase should be considered depending on a client’s readiness for change, which may change throughout treatment. The elements of MI that foster self-efficacy are often not the focus
when MI is included in limited sessions prior to CBT, and much like motivation, which can fluctuate based on different stages of therapy, a clients’ self-efficacy may also waiver when approaching different components of CBT.

**Integrating MI and CBT for anxiety.** The latter two approaches of combining MI and CBT, outlined by Westra and Arkowitz (2011), necessitates greater integration. These methods require the therapist to have expertise in both MI and CBT, and flexibility move between or even simultaneously deliver MI and CBT. This approach was first trialed by Westra and Phoenix (2003) using a series of case studies on individuals with treatment-resistant anxiety disorders. This time very few randomized controlled trials (RCTs) have integrated MI throughout CBT for anxiety. Of the 12 studies included in the recent meta-analysis by Marker and Norton (2018), only three used an integrated approach (Blain, 2013; Simpson et al., 2010; Westra, Constantino, & Antony, 2016). Alongside prelude MI, Blain (2013) and Simpson et al. (2010) allowed the therapist to engage in MI strategies when active signs of resistance were observed. In both studies, no difference was found between the MI + CBT and the CBT-only condition. However, from these studies, it is unclear whether additional MI strategies were employed, as authors did not report how often, with whom, and to what effect additional MI modules were used. It is thus unclear whether an integrated approach is as or more effective than only using MI prior to starting CBT. The final study by Westra et al. (2016) provides some evidence that a fully integrated approach may be effective. This study employed MI strategies when resistance arose in therapy. However, authors additionally note the use of “MI spirit” throughout CBT, indicating greater integration of the two treatments. In their study, a difference was found between integrated MI + CBT and CBT alone, in favor of MI + CBT.

One difficulty with the MI as-needed approach is that it relies on therapist expertise in knowing when to engage in MI techniques. Prior research has shown that therapists often have difficulty identifying in session client resistance and noncollaboration (Hara et al., 2015) and that specialized training beyond usual MI training is necessary for therapists to recognize and adequately respond to client motivation and engagement (Moyers, Houck, Glynn, & Manuel, 2011). Indeed, both Simpson et al. (2010) and Westra et al. (2016) describe extensive training of therapists and ongoing supervision in recognizing signs of ambivalence and resistance. For example, the therapists in Westra et al.’s (2016) study underwent 4 days of training and were required to complete one to two practice cases prior to treating participants. They further received weekly individual supervision during the trial. This highlights the degree of knowledge and practice required to effectively deliver an integrated MI approach when this is flexibly delivered on an as-needed basis.

Many treatment manuals now include flexibly administered MI components, without giving consideration to the difficulty of integrating the techniques effectively, especially when delivered by nonexpert MI and CBT clinicians. Although CBT and MI share many common characteristics, for example both place heightened importance on the therapeutic relationship, the collaborative nature of goal setting and planning, providing and eliciting reflection and feedback, and using guided discovery techniques, there are also key differences, particularly, when considering CBT in its traditional form. Traditionally, CBT was viewed as a structured, manualized, and directive form of therapy where the therapist was placed in the role of expert, akin to a doctor–patient relationship. Emphasis was placed on CBT skills rather than the therapeutic relationship (Balán, Lejuez, Hoffer, & Blanco, 2016). Although this understanding of CBT is dated and numerous studies exist testifying to the important role of therapist expression of empathy, warmth, genuineness, and positive regard on CBT outcome (Kazantzis, Dattilio, & Dobson, 2017), some therapists struggle balancing the equivocal importance of techniques and relational factors (Balán et al., 2016). For example, in a study using prelude MI and CBT, therapists who were rated as competent in delivering MI received low competency ratings for CBT (Simpson...
et al., 2010). Furthermore, studies have shown that therapists have difficulty identifying when MI and CBT should be used based on client presentation (Simpson et al., 2010). Hence, despite the appeal of an integrated approach, this has been difficult to replicate in practice.

In light of these difficulties, one study, using an adolescent sample, has attempted to integrate MI and CBT using a different approach. In their study, Merlo and colleagues (2010) incorporated 20 to 30 min of MI at particular time points within therapy, thereby relying less on therapist expertise. Their RCT produced promising results; in comparison with the CBT alone group, the MI + CBT group had greater posttreatment outcomes, no unadvised early termination of treatment, and a shorter treatment length to reach clinically significant rates of improvement. This provides preliminary evidence to suggest that utilizing MI at fixed time points improves treatment outcomes. However, this intermitted approach has thus far not been examined in adult populations.

Aim of Study: Intermittent MI and tCBT Protocol

The aim of the current study was to adapt and examine an already established 12-week transdiagnostic-CBT (tCBT) protocol (Norton, 2012) to incorporate intermittent MI strategies at specific time points (iMI + tCBT). The iMI + tCBT protocol was developed to include 1 hr of MI, split across four sessions at 15 min each. Brief psychoeducation about motivation in therapy was also provided during the feedback session, following the initial assessment. This aimed to set the scene for an open dialogue between client and therapist about motivation and ambivalence and reduce pretreatment drop out common in CBT samples (Fernandez et al., 2015).

tCBT component. The individual iMI + tCBT protocol is based on Norton’s (2012) 12-week group tCBT protocol. The protocol uses principles of CBT, but is designed to treat any anxiety disorder, rather than individual diagnoses. tCBT assumes that anxiety disorders share underlying pathology and the focus of treatment is, therefore, on shared elements of anxiety disorders (Norton & Barrera, 2012). Sessions 1 to 3 focus on psychoeducation about anxiety and an introduction to cognitive restructuring. Sessions 4 to 9 are exposure sessions. Sessions 10 and 11 focus more broadly on cognitive restructuring techniques and how these extend to global patterns of thinking. The final session is relapse prevention. Each session is approximately 60 min in length.

MI components. MI for 15 min (10 min minimum; 20 min maximum) were included at Sessions 1, 3, 8, and 10 of the protocol. These sessions were chosen based on data available from previous trials of participants who completed the original group tCBT protocol. In an analysis of client motivational language of 58 patients across 12 sessions, these sessions showed decreases in motivational and increase in resistance language over the 12 sessions (Marker et al., 2019). The 15-min sessions were adapted from Westra and Dozois’ (2003) Motivational Interviewing Adapted for Anxiety manual and include Phase 1 and Phase 2 of MI. During the end of the feedback session, participants were provided with psychoeducation about motivation; specifically, ambivalence about change was normalized and an open dialogue about motivation was encouraged throughout treatment. At Session 1, all participants completed a cost–benefit analysis (CBA), or the pros and cons of engaging in treatment. At Sessions 3, 8, and 10, therapists could utilize either Phase 1 (exploring and resolving ambivalence) or Phase 2 (building self-efficacy) of the manual. The MI components were included at the start of each session, after the homework review. Therapists were instructed to open each MI session by looking over the change questionnaire (CQ; Miller & Johnson, 2008), which was completed at the start of each session. The CQ measures desire, ability, reasons, need, and commitment to change by asking participants to rate their agreement to a series of statements on a 10-point Likert-type-scale. Examples of statements include “I want to reduce my anxiety symptoms (desire),” “I can reduce my anxiety symptoms
Participants were asked to explain their answers and clarify any changes since last time. Therapists could utilize scores to guide the choice of MI phase. For example, Phase 1 was recommended when any scores were lower than 5/10 and Phase 2 for higher scores.

### Case Introduction

To protect confidentiality, several demographic characteristics have been altered. “Susan” was a 55-year-old Caucasian woman, residing with her husband and son. Her eldest son had recently moved out of home. She presented to our clinic, via general practitioner (GP) referral, due to ongoing anxiety and mood concerns. She was assessed using the anxiety disorders interview schedule (ADIS-5; Brown & Barlow, 2014) for Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013) by other staff at the clinic. Her diagnoses and corresponding clinician rated severity scores are found in Table 1. Data are also presented for “Case A” and “Case B,” a 42-year old male and 25-year old male, respectively. Case A and B completed the protocol at the clinic during the same time period and their data are included to further support the current protocol as well as provide further elements of discussion in later sections.
3 Presenting Complaints

Susan reported ongoing anxiety and depression symptoms from an early age. She reported previous diagnoses of generalized anxiety disorder (GAD), illness anxiety disorder (IAD), posttraumatic stress disorder (PTSD), and postnatal depression, for which she had received therapy with multiple psychologists over the past 20 years.

She described a recent increase in anxiety, related to stress at work, family difficulties, and her father experiencing a stroke. Susan reported excessive worry, affecting her ability to concentrate and sleep and reported feeling fatigued and tense throughout the day. She reported going to great lengths to avoid situations as she felt the need to overprepare for day-to-day matters. At the time of assessment, she met DSM-5 criteria for GAD.

Susan also reported symptoms consistent with a DSM-5 IAD diagnosis. Susan believed that she had a genetic predisposition to heart attacks (her mother had a heart attack at the age of 70 years) and, more recently, strokes. Susan reported strong beliefs that she would die from a serious health condition triggered by experiences of headache or muscle pains. She reported using Google search engine to confirm or disconfirm diagnoses based on her symptoms and also seeking reassurance from medical staff. Her beliefs of ill health were further perpetuated by a “palm reading” she had from a clairvoyant at 21 years of age, which foresaw an early death.

Susan reported that she did not like to be left alone, as she feared having a stroke or heart attack. She stated that she was always the first person to leave her house, and traveled to work early so she was not left alone at home. She generally traveled to work with her son, and took public transport when this was not possible. Susan reported that although her predominant concern was that she would suffer a heart attack or stroke, she also worried about the health and safety of her sons and husband. She reported that her husband had not been able to go on business trips due to her anxiety and that she had a recent “breakdown” when her eldest son, aged 27 years, moved out of home. She reported that she would call him every day, and this had placed strain on their relationship. Susan reported intense distress when left alone, resulting in three panic attacks over the last 2 months. These symptoms were conducive of a DSM-5 separation anxiety disorder (SAD) diagnosis.

Susan also reported patterns of distress and avoidance, which indicated a DSM-5 diagnosis of social phobia (SP). She reported severe fears of writing in public, speaking in groups, being assertive, and talking to strangers or people in authority. She reported that she felt unintelligent speaking with others, as she had not completed high school. She described being in the same job for many years and unable to progress due to beliefs around inadequacy. Susan reported that she feared being in environments where others were “smarter,” and therefore, avoided many social situations including work functions and meetings, job interviews, and family social gatherings. Susan reported that her husband was “much smarter” and that she submitted to all his requests, for fear of confrontation.

4 History

Susan was born in Northern Europe. She reported a difficult childhood; tainted by the death of her youngest brother, and ongoing witness and experience of domestic violence. Susan described herself as the “caretaker” at home. She was forced to leave school to help support her family care for her brothers. Susan married at the age of 23 years and subsequently moved to Australia. They had two sons and Susan remained a homemaker until her children were in secondary school. Susan then began working as an administration assistant.

5 Assessment

To measure progress during treatment, a series of standardized assessments were used. The ADIS-5 and clinician global impressions scale–severity (CGI-S; Guy, 1976) were completed at
pre, post, and three-month follow-up by other staff members of the clinic, blind to treatment condition. In addition, a number of questionnaires were completed at the beginning of every session including the anxiety disorder diagnostic questionnaire (ADDQ; Norton & Robinson, 2010), the Beck depression inventory—second edition (BDI-II; Beck, Steer, & Brown, 1996), and the change questionnaire (CQ; Miller & Johnson, 2008). The treatment ambivalence questionnaire (TAQ; Rowa et al., 2014) was also provided at Sessions 1 and 6 to assess ambivalence and treatment-related fears. Treatment ambivalence is broken down into three categories in the TAQ: personal consequences of treatment, adverse reactions to treatment, and inconvenience of treatment.

6 Case Conceptualization

Susan presented to the clinic with several comorbid diagnoses. Alongside her anxiety disorders, Susan also reported subthreshold depression symptoms. One of the advantages of tCBT is that it has shown particular promise in treating individual with comorbid diagnoses (Norton et al., 2013). Rather than first treating Susan for GAD, followed by treating her IAD, SAD, and SP, the tCBT protocol allows for all diagnoses to be treated simultaneously. This significantly reduces treatment length and also allows Susan to learn transferrable CBT skills.

We furthermore decided to use Susan’s case to assess our iMI + tCBT protocol as she presented with relatively high rates of treatment ambivalence. Throughout her life Susan had seen many psychologists and engaged in “talk” therapy. Susan had not intended to try psychotherapy again, as she felt it had not helped in the past. Susan presented to the clinic due to the insistence of her GP, who was particularly concerned about her diagnosis of IAD. During her assessment Susan reported that she “didn’t think CBT would work,” and described her symptoms as part of her personality, for example, “this is just who I am.” Susan, furthermore, presented with low levels of self-efficacy, and had doubts about her ability to change and to engage in components of treatment (specifically exposure tasks).

7 Course of Treatment and Assessment of Progress

Session 1: MI and Psychoeducation

MI. Susan was first asked about her responses to the CQ (Figure 1), as these were unexpectedly high based on her prior levels of ambivalence. When describing her scores, Susan reported that she had a genuine desire to change; however, she was unsure if change was possible. Susan’s lowest scores were for questions relating to her perception of ability and commitment to change. The TAQ, a questionnaire that examines client concerns about commencing treatment, provided somewhat different results. In comparison with other individuals with diagnoses of SP and GAD, Susan’s scores on the TAQ indicated high levels of ambivalence about starting treatment (Rowa et al., 2014), particularly in categories of personal consequences of treatment and adverse reactions to treatment. For example, Susan agreed with questions such as “treatment might cause me too much anxiety or distress,” and “treatment won’t work and I’ll be like this for the rest of my life.”

During the MI phase, Susan was also invited to explore her reasons for coming to treatment and her responses were recorded on a CBA form. Susan reported that her main reason for attending treatment had been due to the insistence of her GP. Susan reported that she felt dependent on her GP and did not want to “let her down.” The main deterrent Susan identified for treatment was that she had had several courses of psychotherapy in the past, and although she received emotional support, she did not notice a change in symptoms. She also reported that her life at present was built around avoidance, and that it would be difficult to break this pattern. Furthermore,
Susan doubted her ability to change; stating that her symptoms were a part of her and that she “wasn’t brave enough.” Despite these disadvantages, Susan also reported some hope for her future, stating that through symptoms relief she would enjoy a more balanced home and work life, have better relationships with her family, and have more confidence, which may lead to a change in job or pursuing studies. Both the therapist and Susan were provided with a copy of the CBA.

Through the exploration of pros and cons, it was evident that Susan’s main deterrent for treatment was concern that “treatment won’t work.” The therapist and Susan, therefore, discussed ways in which Susan could monitor her progress in an objective way. As anxiety and depression scores were recorded via the ADDQ and BDI-II at every session, Susan was provided with her scores at the start of each session.

**CBT.** Psychoeducation was provided regarding anxiety, its development, and maintenance, and a specific look at the three components of anxiety: cognitive, psychological, and behavioral symptoms. An example was provided as to how these components interact and intensify the experience of anxiety, and how CBT aims to break this cycle. Homework was set to monitor the three components of anxiety over the week.

**Session 2: Automatic Thoughts**

Susan did not complete the written component of her homework task, however, was able to provide scenarios over the week in which she noticed the different components of anxiety. Susan described that the day before, someone at work had asked her why she was taking the morning off (for therapy). Susan reported that she felt embarrassed for seeking therapy and that her thoughts were in relation to other’s judgments. She noticed her heart racing, sweaty hands, and a feeling of being trapped. She reported that she wanted to run away, but instead “froze,” and then said she had an “appointment.” During this session, Susan was introduced to the concept of thinking errors. Although Susan accepted that her thoughts might not be true reflections of

![Figure 1. CQ scores over time.](image)

*Note. CQ = change questionnaire.*
Session 3: MI and Cognitive Restructuring

MI (Phase 2). Susan was asked about her increased scores on the CQ and she responded that over the week she began to notice many “irrational thoughts.” Susan stated, “my anxiety is everywhere, I noticed the thinking errors in everything I do.” Susan continued, that although she always recognized her anxiety as disabling, she did not realize how much she catastrophized even day-to-day tasks. She stated, “It’s like I’m on the lookout for something to go wrong, even when everything’s fine.” The following dialogue continued:

Therapist: It sounds like you became very aware of your thinking patterns over the week [reflection]. What worries you about these thinking errors [open question to elicit change talk]?
Susan: Well, I guess I end up stressing out a lot. Like I’m constantly worried about things that might happen or could happen. I end up getting really annoyed too, with my kids and husband and I know they get annoyed with me. My husband always says “why can’t you just relax,” or “can’t we enjoy this.”
Therapist: It sounds like it’s affecting your relationships [reflection to elicit change talk].
Susan: It is, like Garry (husband) always says, I worry so much about the little stuff that I end up missing the big stuff.
Therapist: Do you agree with him [evocation of personal beliefs about anxiety]?
Susan: Yeah, like last year when we went on holiday, I was so stressed about the hotel, and the travel and keeping everyone safe. I didn’t have a nice time.
Therapist: How would things be different without the anxiety and worries [open question to elicit change talk]?
Susan: Oh my god. I could enjoy myself. I wouldn’t be so afraid all the time. I would be more independent. My family would stop hating me. . . I don’t know, this week I just noticed how much I’m actually doing it (worrying), like even little things.
Therapist: And what was it like to notice those worry thoughts this week [open question]?
Susan: I just realised how much it’s affecting me. Like yesterday I was running for the tram, and when I got on my heart was pounding, and my first thought was “I’m having a heart attack” and then I just started panicking. I almost got off the tram.
Therapist: So part of you wanted to get off the tram [reflection]. What made you decide to stay on [open question to elaborate personal choice]?
Susan: Well, I guess I just realised that I was panicking, it’s like I talked myself down. . . Like when we spoke about catastrophizing last week. I was kind of giving myself a pep talk, like “Susan, maybe you’re catastrophizing.”
Therapist: You said you gave yourself a pep talk, how is this reaction different to how you would have responded before coming along to therapy [open question to reflect change]?
Susan: I don’t know, well I guess I would have had a panic attack. That idea that my thoughts might not be true really stuck with me last week. I never really thought about my thoughts before, I just thought my thoughts were me, you know?
Therapist: How has thinking about your thoughts as thoughts, rather than accurate depictions of reality helped you this week [open question to elicit change talk]?
Susan: Well it made me think that maybe I can do something about it. Even saying to myself “Susan, maybe you’re catastrophizing,” calmed me down. Like I actually stopped panicking.
Therapist: That’s reflected in your anxiety scores this week too [reference to ADDQ].
Susan: I know! I dropped by 10 points.

CBT. The example that Susan had brought up during the MI component was used to continue the process of cognitive restructuring. Susan was invited to recall her automatic thoughts, and identify any thinking errors. The therapist then provided Susan with a handout of disputing questions, and Susan was encouraged to pick out questions that may help challenge her thinking errors. Susan was able to complete this task, and asked questions such as “what is the evidence that I’m having a heart attack?” and “does a racing heart really mean I’m having a heart attack?” Susan described, “it all seems so logical when we talk about it now, but I don’t know how I’ll do this when I’m actually panicking.” MI techniques were used to support Susan’s self-efficacy through the following dialogue:

Therapist: You mentioned that when this happened yesterday you gave yourself a pep talk?
Susan: Yeah I did, I just kept telling myself that I was catastrophizing.
Therapist: Can you tell me how you were able to notice your thoughts and give yourself a pep talk even though you were panicking [clarifying discrepancies]?
Susan: I’m not sure, I just did. It was either give myself a pep talk or get off the tram.
Therapist: Both of these would have lowered your anxiety in the moment. What made you decide to try to endure the anxiety, rather than get off the tram [open question to elaborate change behavior]?
Susan: Well I had to get to work [laughs]. . .
Therapist: You were willing to experience some anxiety in order to get to work [reflection]
Susan: Well yeah, otherwise I’d get fired.
Therapist: You mentioned earlier that previously you’d have gotten off or had a panic attack [reflection].
Susan: Mmmm, I guess the pep talk helped.
Therapist: And you were able to do this despite experiencing panic symptoms? (Susan nods).
Therapist: How different is the pep talk you gave yourself to what we are doing now?
Susan: I don’t know, I didn’t ask myself these exact questions but I did try to see my thoughts as thoughts and objectively look at the situation.
Therapist: That’s what we are trying to do with these questions too.
Susan: That’s true, so I was sort of already doing it.

Sessions 4–9: Exposure Sessions

Susan’s exposure sessions were based on the hierarchy she completed, displayed in Table 2. She described 10 scenarios corresponding to different anxiety disorders, and provided subjective units of distress scale (SUDS) ratings. During her first exposure session, Susan was asked to write a “worry script,” pertaining to her anxiety around health. She was asked to imagine her “worst case” scenario, write out the script, and then read it aloud to the therapist. The remainder of the session was used to identify thinking errors in the script and dispute these using cognitive restructuring techniques. Susan reported that “her worries seem silly,” when written out, and that she could recognize that many thoughts had thinking errors. During the cognitive restructuring process, Susan came up with the rational response, “it’s a thought; it’s not a fact.” The homework task for the first week was to write a worry script about the health of her family. Susan was able to do this task and reported that the rational response from the previous session was applicable. She stated that she had started using this response to “stop her worry spiral,” over the past week and found this beneficial.
For Susan’s second exposure, she was encouraged to participate in an exercise routine, designed to elevate her heart rate. Susan reported high initial anxiety, stating that she “had not exercised in years.” She reported being fearful of experiencing bodily sensations such as an increased heart rate. Cognitive restructuring techniques were used to identify automatic thoughts, including; “I’m so unfit,” and “I’ll have a heart attack.” These thoughts were identified as similar to those of her first cognitive restructuring exercise (when Susan ran for the tram). Susan was able to effectively dispute these thoughts and summarized this process with the following rational response: “My heart should pound when I am exercising, it means the exercise is working.” Susan began the exercise routine and reported that her anxiety significantly rose. She stopped on one occasion and reported SUDS of 75/100. Susan was encouraged to take a few deep breaths and to remind herself of her rational response. Susan responded that she “couldn’t do it,” and the therapist employed MI techniques.

**Therapist:** Thank you for giving this a go [affirmation]. Susan, can you tell me what’s getting in the way?

**Susan:** My chest hurts and I feel like I might panic. I feel silly doing this (begins to cry).

**Therapist:** Okay. Susan, you said you feel really silly doing this. Can you tell me why you think we’re doing this [open question to elaborate rationale]?

**Susan:** Umm, so that my heart rate goes up.

**Therapist:** So that your heart rate goes up. Why would we want your heart rate to go up?

**Susan:** I don’t know, so I can see that nothing bad will happen.

**Therapist:** Can you think of a time when your heart rate went up and nothing bad happened?

**Susan:** Yeah the time on the tram.

**Therapist:** Would it be all right to try an imaginative exercise together [asking permission]?

**Susan:** Okay

**Therapist:** I invite you to close your eyes and picture yourself on the tram that day. I invite you to try to picture running for the tram and then noticing your heart pound, and your thoughts racing and the feeling of sweating. Can you do that [imaginative exercise]?

**Susan:** Mmm Hmm (pause)

**Therapist:** Okay, now remember back to the pep talk. What did you say to yourself?

**Susan:** I’m catastrophizing and these are just thoughts. I kept repeating “it’s just a thought.”

**Therapist:** It’s just a thought. Would saying this to yourself now help you complete the exercise again?

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**Table 2. Susan’s Fear Hierarchy.**

<table>
<thead>
<tr>
<th>Fear</th>
<th>SUDS rating</th>
<th>Anxiety disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Worrying about own and family’s health</td>
<td>25</td>
<td>GAD</td>
</tr>
<tr>
<td>2. Meeting someone new</td>
<td>40</td>
<td>Social anxiety</td>
</tr>
<tr>
<td>3. Exercising</td>
<td>40</td>
<td>Illness anxiety</td>
</tr>
<tr>
<td>4. Telling someone “no”</td>
<td>50</td>
<td>Social anxiety</td>
</tr>
<tr>
<td>5. Speaking to a “smart person”</td>
<td>50</td>
<td>Social anxiety</td>
</tr>
<tr>
<td>6. Giving a different opinion</td>
<td>50</td>
<td>Social anxiety</td>
</tr>
<tr>
<td>7. Experiencing a spontaneous body sensation, e.g., headache</td>
<td>60</td>
<td>Illness anxiety</td>
</tr>
<tr>
<td>8. Being alone</td>
<td>70</td>
<td>Separation anxiety</td>
</tr>
<tr>
<td>9. Speaking in a group</td>
<td>75</td>
<td>Social anxiety</td>
</tr>
<tr>
<td>10. Getting sick (self or family)</td>
<td>100</td>
<td>Illness anxiety</td>
</tr>
</tbody>
</table>

Note. SUDS ratings = subjective units of distress; GAD = generalized anxiety disorder, 0 (no fear)-100 (extreme fear) scale.
Susan: Maybe
Therapist: Would you be willing to give it a go [asking permission]?

Susan was able to continue the routine and noted that her SUDS decreased to 50/100. Susan was invited to “sit with” her bodily sensations and say aloud the different sensations she noticed, for example, “I’m sweating.” She was asked to say her rational response after each reported symptom, for example, “I’m sweating, I should sweat after exercise, it means it is working.” Susan reported that during this process her anxiety levels did not completely disappear, but that the process reduced her SUDS to 25/100, which she described as manageable.

Additional exposures (in session and for homework) included having a conversation with someone Susan perceived as more intelligent than her, offering a different opinion to someone else, giving a small presentation about her progress in therapy (social anxiety), sitting in the emergency department at a local hospital, being near someone else that was sick (illness anxiety), leaving her cell phone at home, and leaving her home to run errands without company or telling family members where she was going (separation anxiety). Susan was able to complete all in-session exposure tasks. On one occasion Susan did not complete her exposure homework (leaving phone at home) due to level of distress. MI strategies, as well as problem-solving skills, were used to make the exposure more manageable. A secondary hierarchy was made to break down the task of leaving phone at home and Susan carried out these smaller tasks over the course of the week.

MI (Phase 2). During the MI component at Session 8, Susan was again asked to explain her answers to the CQ. The following dialogue ensued, highlighting a change in Susan’s perception of her own ability to cope with anxiety:

Therapist: I can see here that your scores are higher this week than last week. Can you tell me why you have put a 9 here this week, when last week you rated a 7? (In reference to question: I can change my anxiety problems) [using ruler].
Susan: I don’t know. I think I’m starting to see progress, and even Garry said he was noticing a change.
Therapist: Can you tell me more about this? What specifically have you noticed [open question to elicit change talk]?
Susan: Well I still get anxious, but it’s like I have more control. I am doing things that I didn’t think I could.
Therapist: So if I told you at the beginning that you would be giving a talk. . .
Susan: Oh god, I wouldn’t have believed you. With all the exposures... I don’t know, I became so used to avoiding or over-preparing, I lost touch with myself, with my family.
Therapist: You’re noticing many changes. How do you think things will be different in 2 years if you continue to practice these skills? [open question to elicit change talk]
Susan: Well if I keep improving then I think I’ll have a lot more freedom. Like maybe trying new things at work, doing fun things with my family. Maybe make some new friends. I don’t know, I’m starting to see the light at the end of the tunnel.

Sessions 10 and 11: MI and Advanced Cognitive Restructuring

MI (Phase 2). In Session 10, Susan rated her motivation as 120/120 on the CQ. Due to this score, the therapist asked Susan to engage in a role-play exercise. Susan was asked to imagine herself at the beginning of therapy. She was asked to role-play a therapist and provide advice to the Susan that was about to commence therapy. During the exercise, Susan identified the components of therapy that had helped her the most, including her rational response “it’s a thought, it’s
not a fact.” She also stated that above all else it is important to “believe in yourself,” and that “the exposures seem harder than they actually are.”

**CBT.** The CBT component of Sessions 10 and 11, focused on cognitive restructuring of core beliefs. Susan was asked to monitor her anxiety, stress, and depression and encouraged to consider the content of thoughts leading to changes in mood. Susan noticed that her mood changed when she degraded herself; thoughts such as, “I’m stupid,” and “I’m worthless,” and when she underestimated her ability to cope; for example, “I can’t cope,” or “this is too much.” Susan noticed that these thoughts occurred daily, and often in the context of anxiety, for example, self-deprecating thoughts occurring in social settings. Cognitive restructuring techniques were used to evaluate these thoughts, and again Susan found her rational response of “it’s a thought, it’s not a fact” helpful in challenging these beliefs about herself.

**Session 12: Relapse Prevention**

Susan was provided psychoeducation on relapse prevention and encouraged to think about her own early warning signs. She was encouraged to think about this program as the start of her journey toward recovery, and that skills, such as cognitive restructuring and exposure, should be continued to practice. Susan was also provided with the “advice” she had given herself when she was acting as the therapist during the MI component of Session 10.

**Assessing Progress: Session-by-Session Scores**

Scores for the ADDQ and BDI-II for each case are presented in Table 1. Susan’s self-reported anxiety at Session 1 was on par with what we would expect from someone with an anxiety disorder, and although she did not meet criteria for major depressive disorder, her depression scores, as assessed by the BDI, were within the severe range for depression. Susan’s anxiety and depression scores decreased, falling below clinically significant levels at posttreatment. Susan’s self-reported anxiety scores decreased by 48% and her depression scores decreased by 74%. Similarly, although depression was not specifically targeted, Case A (66%) and B (63%) also found marked decreases in self-reported depression. The lowest self-reported anxiety decrease was observed in Case B (38%), who interestingly showed greater symptom improvement at the halfway point (Session 6 = 53%), discussed in later sections.

**8 Complicating Factors**

In this study, we planned to use the CQ as a guide for assessing motivation. However, it was found that although participants often reported ambivalence about treatment this was not reflected in their responses to the CQ (Figure 1). Past research has indicated that the CQ is prone to ceiling effects (Westra, 2011). This provided difficulty when deciding which phase of MI to use. Although the CQ provided an opening for a discussion on motivation, its scores were less useful in deciphering which MI phase to use. Interestingly treatment ambivalence, as measured by the TAQ, actually increased from Session 1 to Session 6 in all cases (Susan = 5%; Case A = 14%; Case B = 15%), which may in part be due to a greater understanding of treatment involvement (e.g., exposure). This indicates that the TAQ, which in this study was only measured at Sessions 1 and 6, may provide a more accurate depiction of ambivalence. The CQ appears to measure client’s beliefs about need for therapy, rather than treatment-related fears. As scores on the CQ remained high, Phase 2 was employed with all three cases. This may have been particularly problematic for Case B, who may have benefited from use of Phase 1. Case B showed greatest improvement in anxiety symptoms at the mid-point of therapy and experienced an increase in
symptoms at posttreatment. As his CQ scores remained relatively high from Session 6 to 12 onward, Phase 2 was used. The TAQ was not used as a discussion point in therapy and his increase in scores may have prompted the therapist to further explore his increased fears and ambivalence of therapy.

9 Access and Barriers to Care

The advantage of the tCBT protocol is that therapists treating anxiety disorders require training in only one protocol. Once learned, therapists are able to provide an evidence-based treatment to any client regardless of specific anxiety disorder diagnosis. This in theory should provide greater access to evidence-based treatments. In the current study, a doctoral-level clinical psychology student provided the treatment. The student underwent extensive training in tCBT, attending a daylong tCBT workshop, as well as watching over 120 hr of video recordings of the tCBT protocol. The student also received weekly supervision by the second author, a registered clinical psychologist, with extensive experience in the area of tCBT. The student was able to successfully administer the protocol to Susan, and Cases A and B, although each presented with different anxiety diagnoses. Furthermore, although extensive training was provided for tCBT, the student received relatively little training in MI. MI training included reading of the Westra and Dozois’s MI protocol and attending a 2-day MI workshop. As MI was included at predetermined time points, the student did not require expertise in recognizing ambivalence or resistance, but rather used these time points as opportunities to “check-in” on client motivation. Although increasing training and expertise in a field is always encouraged, it is promising that even a therapist with relatively little training in MI can deliver the iMI + tCBT protocol. However, it is worth noting that both Susan and Case A had relatively high levels of motivation and the intermittent MI approach, rather than improving motivation, may have increased levels of self-efficacy and greater confidence in generalizing skills. Case B, who experienced the least improvement may have benefited from greater exploration of ambivalence, which a more experienced therapist may have identified (rather than reliance on CQ scores).

10 Follow-Up

Pre, post, and 3-month follow-up scores are found in Table 1. Susan initially presented to the clinic, meeting DSM-5 criteria for GAD, SAD, SP, and IAD in the moderate-severe range. She was given a CGI-S rating of 5, indicating she was ‘markedly ill,’ pretreatment. At posttreatment Susan no longer met criteria for any anxiety disorder, with all CSR scores falling below the clinically significant cutoff of 4. Although Susan still reported mild symptoms of anxiety, she described no longer allowing the anxiety to guide her life. During the postassessment, she reported using her skills every day, especially cognitive restructuring skills. She reported feeling happier and more confident. Her overall CGI-S rating reduced to a two indicative of “borderline mentally ill.” Similarly, at 3-month follow-up, Susan’s scores had again decreased falling within the normal range. These scores were also reflected in her ADDQ scores, which continued to fall at 3-month follow-up, from an initial 48% decrease to a 59% decrease in anxiety scores at 3-month follow-up. These findings support prior research by Westra et al. (2016) who found that MI continues to improve treatment outcomes at follow-up. An explanation for this finding may be that MI increases confidence in using CBT skills even after end of therapy, as Susan reported to do. Indeed prior research has shown that MI may help clients believe progress is based on their own abilities, rather than due to therapist expertise (Khattra et al., 2017).

11 Treatment Implications of the Case

Susan’s treatment response, and the treatment response of Case A and B, shows significant improvement over the course of iMI + tCBT treatment, and highlights the utility of including MI
strategies throughout therapy at preconsidered time points. Although there are clear benefits of fully integrating MI and CBT, previous research has had numerous difficulties integrating the two treatments due to conceptual differences and problems with therapist responsiveness. Furthermore, extensive training appears to be necessary to flexibly deliver an integrated approach. A criticism of the intermittent approach may be that it removes the flexibility and element of responsiveness that is often attributed to MI. Research has suggested that MI may not be relevant for all clients and even be detrimental to treatment process if clients are already motivated (Hettema, Steele, & Miller, 2005). In our case studies, although reported motivation was high, both therapist and participants appeared to find usefulness in engaging in Phase 2 of MI. For example, in Susan’s case, despite her high reports of motivation, she often underestimated her own ability to cope in a situation. As CBT is generally considered a time-limited therapy, where the goal of treatment is for clients to learn skills, and in a sense become their own therapists, fostering self-efficacy within a client is key. Indeed, prior research has found that changes in self-efficacy during CBT for anxiety disorders is predictive of treatment outcomes (Brown et al., 2014). It was through Phase 2 MI modules that Susan had a chance to review her progress and consider herself as an agent for change. As one of Susan’s primary causes for ambivalence was the belief that treatment might not work, providing her with regular updates on her progress using her scores on the ADDQ may have contributed to her remarkable treatment response. Riccardi, Timpano, and Schmidt (2010) made similar observations in their single case study of a patient with OCD. This case study also used MI and CBT techniques and found that regular assessment and tracking of symptoms reinforced the effectiveness of treatment and provided greater motivation for adherence.

Similarly, Case A also reported high levels of motivation based on the CQ throughout treatment. He was an unemployed husband and father of two children, who following a car accident developed excessive fear and anxiety in most areas of his life. He was very clear about wanting to better manage his anxiety symptoms to “fulfil his role in the family.” However, he felt that his “confidence was shattered,” after losing his job. During MI components the therapist employed strategies from Phase 2, for example identifying his strengths and exploring previous times he had succeeded at making changes in his life. An activity he found particularly useful was exploring strengths from the viewpoint of his wife and children. Case A extended this activity by asking his children to write him letters of encouragement, which he would read to himself before completing exposure tasks. The two cases highlight the usefulness promoting self-efficacy throughout the process of CBT. Furthermore, the therapist noted that the protocol provided her more confidence in delivering MI and she noted that elements of MI started to “slip” into treatment. Previous research has found that using MI consistent responses during moments of resistance in CBT positively affects therapy outcomes (Aviram, Westra, Constantino, & Antony, 2016). Furthermore, key elements of MI such as empathy, collaboration, warmth, and positive regard are known to affect therapeutic outcomes in CBT (Kazantzis et al., 2017). The intermittent MI + tCBT protocol may, therefore, be of particular use to novice therapists and trainees hoping to improve their skills in MI.

12 Recommendations to Clinicians and Students

One of the key challenges in delivering semistructured treatment protocols is the degree of rigidity with which a therapist adheres to the protocol. In our protocol, we have suggested a 15-min MI component as part of a 60-min session, understanding that in clinical setting, adhering to strict time limits is not always feasible, and increased rigidity is likely to undermine the therapy process (Zuckoff, Swartz, & Grote, 2008). Thus, it is important to consider the key aims of the MI components—enhancing motivation (Phase 1) and self-efficacy (Phase 2)—and why integrating these at preconsidered time points may be useful in clinical settings. Although previous
research has shown that MI techniques can be merged throughout CBT to increase motivation and resolve active signs of resistance and ambivalence (Arkowitz & Burke, 2008), this relies on therapist expertise and the client to display observable signs of resistance. In our case studies, we noted that unless specifically prompted, the participants often did not describe ambivalence or resistance. However, when prompted, participants could provide examples of ambivalence, creating the opportunity to explore barriers to treatment and problem solve these. We, therefore, recommend that clinicians regularly “check-in” on their client’s level of ambivalence, which may be done through verbal questioning or using questionnaires such as the TAQ.

The MI component in our protocol was placed after the homework review. During the creation of the protocol, we debated where to place the MI section and how best to transition from the MI to CBT framework, within one session. As outlined by previous literature (e.g., Flynn, 2011), an MI therapist allows the client to take on the role of expert, whereas traditional CBT is viewed as a directive therapy, whereby the therapist takes on the role of expert. We found that using MI techniques after the homework review allowed for a natural transition into the discussion of treatment engagement. As participants would provide examples of either engagement (completing homework) or disengagement (not completing homework), it allowed the therapist to further enquire about current motivation levels. For example, if homework was completed, MI strategies could be used to strengthen perceived ability and self-efficacy, whereas barriers and ambivalence could be explored when homework was not completed. Using MI strategies, to increase client change language then often naturally progressed into the change driven component of treatment (CBT section).

In our study, we attempted to predominately employ MI techniques during the 15-min modules, and then transition toward CBT skills. As our clients showed generally high levels of motivation, and Phase 2 of the manual was used, this allotted time was sufficient. For individuals with higher levels of ambivalence greater allocation of time may be required, particularly at early stages of treatment. If clients are displaying high ambivalence, and the focus is on Phase 1 of the MI treatment manual, it will likely be difficult to abruptly transition to CBT. As such, we recommend employing clinical judgment when moving from one modality to the other. The purpose of the protocol is not to rigidly enforce allotted times, but to aid novice therapists in improving delivery of MI skills and to remind experienced clinicians to monitor ambivalence and motivation throughout therapy, even in absence of clear resistance markers.

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